IN THE CLAIMS

- 1. (Cancelled)
- 2. (Currently Amended) A transmission power control system as set forth in claim 1, in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations.

wherein said base station comprising control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, and wherein assuming that a frame number of transmission frame to said mobile station is CFN and said balance adjustment period is Nperiod frame, said control means is responsive to reception of said control instruction to perform initiation control of said balance adjustment period from the frame of the frame number CFN to be mod (CFN, m x Nperiod) = L (wherein, m is natural number, L is 0 or natural number smaller than m x Nperiod common to all base stations).

3. (Original) A transmission power control system as set forth in claim 1, in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base

stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations.

wherein said base station comprising control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, and wherein assuming that a frame number of transmission frame to said mobile station is CFN and said balance adjustment period is Nperiod frame, said control means is responsive to reception of said control instruction to perform initiation control of said balance adjustment period from a frame where a number at the first digit as expressing said CFN by m x Nperiod base number (wherein, m is natural number) becomes a predetermined value.

4. (Currently Amended) A transmission power control system as set forth in claim 1, in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations,

wherein said base station comprising control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, and wherein assuming that a frame number of transmission frame to said mobile station is CFN and said balance adjustment period is Nperiod frame, said control means is responsive to

reception of said control instruction to perform initiation control of said balance adjustment period from a frame where said CFN becomes m x Nperiod + L (wherein m is 0 or natural number and L is 0 or natural number common to all base stations).

5. (Original) A transmission power control system as set forth in claim 4, wherein said m is natural number and said L is 0.

Claims 6-7 (Cancelled)

8. (Currently Amended) A transmission power control system as set forth in claim 1, in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations,

wherein said base station comprising control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period,

wherein said control station includes means for selecting said Nperiod as a value satisfying a relationship of k x Nperiod = CFNmax (k is integer) assuming that a frame number of transmission frame to said mobile station is CFN, said balance adjustment period is Nperiod frame, minimum value of said CFN is 1, maximum value is CFNmax or minimum value is 0 and maximum value is CFNmax - 1, and

control means of each of said base station initiate control of said balance adjustment period from a frame to be m x Nperiod + L (wherein m is 0 or natural number and L is 0 or natural number common to all base stations).

9. (Currently Amended) A transmission power control system as set forth in claim 1, in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations,

wherein said base station comprising control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, and wherein assuming that a frame number of transmission frame to said mobile station is CFN, said balance adjustment period is Nperiod frame, said control means selects said Nperiod as a value satisfying a relationship of k x Nperiod = CFNmax (k is integer) when minimum value of said CFN is 1, maximum value is CFNmax or minimum value is 0 and maximum value is CFNmax - 1, to initiate control of said balance adjustment period from a frame to be m x Nperiod + L (wherein m is 0 or natural number and L is 0 or natural number common to all base stations).

10. (Currently Amended) A transmission power control system as set forth in claim 1, in a cellular communication system including a plurality of cells, a plurality of base

stations respectively arranged in respective of said plurality of cells, mobile stations

located within said cells, and control station provided in common for said plurality of

base stations and transmitting control instruction for balance adjustment of transmission

power to respective of said mobile stations from said base stations,

wherein said base station comprising control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, and wherein said control means sets an adjustment amount in said balance adjustment at a value of predetermined ratio to a difference between said transmission power upon initiation of said balance adjustment period and a reference value.

11. (Cancelled)

12. (Currently Amended) A transmission power control method as set forth in claim

11, in a cellular communication system including a plurality of cells, a plurality of base

stations respectively arranged in respective of said plurality of cells, mobile stations

located within said cells, and control station provided in common for said plurality of

base stations and transmitting control instruction for balance adjustment of transmission

power to respective of said mobile stations from said base stations,

wherein said method comprising a control step of controlling initiation of a

balance adjustment period for performing said balance adjustment from a frame number

determined on the basis of frame number of the balance adjustment period, in each base

station, and wherein assuming that a frame number of transmission frame to said mobile

station is CFN and said balance adjustment period is Nperiod frame, said control step includes a step of initiating control of said balance adjustment period from the frame of the frame number CFN to be mod (CFN, m x Nperiod) = L (wherein, m is natural number, L is or natural number smaller than m x Nperiod common to all base stations) in response to reception of said control instruction.

13. (Currently Amended) A transmission power control method as set forth in claim

11, in a cellular communication system including a plurality of cells, a plurality of base

stations respectively arranged in respective of said plurality of cells, mobile stations

located within said cells, and control station provided in common for said plurality of

base stations and transmitting control instruction for balance adjustment of transmission

power to respective of said mobile stations from said base stations,

wherein said method comprising a control step of controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, in each base station, and wherein assuming that a frame number of transmission frame to said mobile station is CFN and said balance adjustment period is Nperiod frame, said control step is responsive to reception of said control instruction to perform initiation control of said balance adjustment period from a frame where a number at the first digit as expressing said CFN by m x Nperiod base number (wherein, m is natural number) becomes a predetermined value.

14. (Currently Amended) A transmission power control method as set forth in claim

11, in a cellular communication system including a plurality of cells, a plurality of base

stations respectively arranged in respective of said plurality of cells, mobile stations

located within said cells, and control station provided in common for said plurality of

base stations and transmitting control instruction for balance adjustment of transmission

power to respective of said mobile stations from said base stations,

wherein said method comprising a control step of controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, in each base station, and wherein assuming that a frame number of transmission frame to said mobile station is CFN and said balance adjustment period is Nperiod frame, said control step includes a step responsive to reception of said control instruction to perform initiation control of said balance adjustment period from a frame where said CFN becomes m x Nperiod + L (wherein m is 0 or natural number and L is 0 or natural number common to all base stations.

15. (Currently Amended) A transmission power control method as set forth in claim 14, wherein said m is natural number and said L is 0.

Claims 16-17 (Cancelled)

18. (Currently Amended) A transmission power control method as set forth in claim

11. in a cellular communication system including a plurality of cells, a plurality of base

stations respectively arranged in respective of said plurality of cells, mobile stations

located within said cells, and control station provided in common for said plurality of

base stations and transmitting control instruction for balance adjustment of transmission

power to respective of said mobile stations from said base stations,

wherein said method comprising a control step of controlling initiation of a

balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, in each base station,

wherein-said control station performs a step of selecting said Nperiod as a value satisfying a relationship of k x Nperiod = CFNmax (k is integer) assuming that a frame

satisfying a relationship of k x Nperiod = CFNmax (k is integer) assuming that a frame number of transmission frame to said mobile station is CFN, said balance adjustment period is Nperiod frame, minimum value of said CFN is 1, maximum value is CFNmax or minimum value is 0 and maximum value is CFNmax - 1, and

control step in each of said base station initiate control of said balance adjustment period from a frame to be m x Nperiod + L (wherein m is 0 or natural number and L is 0 or natural number common to all base stations).

19. (Currently Amended) A transmission power control method as set forth in claim

11, in a cellular communication system including a plurality of cells, a plurality of base

stations respectively arranged in respective of said plurality of cells, mobile stations

located within said cells, and control station provided in common for said plurality of

base stations and transmitting control instruction for balance adjustment of transmission

power to respective of said mobile stations from said base stations,

wherein said method comprising a control step of controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, in each base station, and wherein assuming that a frame number of transmission frame to said mobile station is CFN, said balance adjustment period is Nperiod frame, said control step selects said Nperiod as a value satisfying a relationship of k x Nperiod = CFNmax (k is integer) when minimum value of said CFN is 1, maximum value is CFNmax or minimum value is 0 and maximum value is CFNmax - 1, to initiate control of said balance adjustment period from a frame to be m x Nperiod + L (wherein m is 0 or natural number and L is 0 or natural number common to all base stations).

20. (Currently Amended) A transmission power control method as set forth in claim 11, in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations.

wherein said method comprising a control step of controlling initiation of a

balance adjustment period for performing said balance adjustment from a frame number

determined on the basis of frame number of the balance adjustment period, in each base

station, and wherein said control step sets an adjustment amount in said balance

adjustment at a value of predetermined ratio to a difference between said transmission

power upon initiation of said balance adjustment period and a reference value.

- 21. (Cancelled)
- 22. (Currently Amended) A base station as set forth in claim 21, in a cellular communication system including a plurality of cells, a plurality of said base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations, said base station comprising:

 control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, and wherein assuming that a frame number of transmission frame to said mobile station is CFN and said balance adjustment period is Nperiod frame, said control means initiation control of said balance adjustment period from the frame of the frame number CFN to be mod (CFN, m x Nperiod) = L (wherein, m is natural number, L is or natural number smaller than m x Nperiod common to all base stations) in responce to reception of said control instruction.
- 23. (Currently Amended) A base station as set forth in claim 21, in a cellular communication system including a plurality of cells, a plurality of said base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base

stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations, said base station comprising:

control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, and wherein assuming that a frame number of transmission frame to said mobile station is CFN and said balance adjustment period is Nperiod frame, said control means is responsive to reception of said control instruction to perform initiation control of said balance adjustment period from a frame where a number at the first digit as expressing said CFN by m x Nperiod base number (wherein, m is natural number) becomes a predetermined value.

24. (Currently Amended) A base station as set forth in claim 21, in a cellular communication system including a plurality of cells, a plurality of said base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations, said base station comprising:

control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, and wherein assuming that a frame number of transmission frame to said mobile station is CFN and said balance adjustment period is Nperiod frame, said control means is responsive to reception of said control instruction to perform initiation control of said balance adjustment period from a frame

where said CFN becomes m x Nperiod + L (wherein m is 0 or natural number and L is 0 or natural number common to all base stations.

25. (Original) A base station as set forth in claim 24, wherein said m is natural number and said L is 0.

Claims 26-27 (Cancelled)

28. (Currently Amended) A base station as set forth in claim 21, in a cellular communication system including a plurality of cells, a plurality of said base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations, said base station comprising:

control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, and wherein assuming that a frame number of transmission frame to said mobile station is CFN, said balance adjustment period is Nperiod frame, said control means selects said Nperiod as a value satisfying a relationship of k x Nperiod = CFNmax (k is integer) when minimum value of said CFN is 1, maximum value is CFNmax or minimum value is 0 and maximum value is CFNmax - 1, to initiate control of said balance adjustment period from a frame to be m x Nperiod +

L (wherein m is 0 or natural number and L is 0 or natural number common to all base stations).

- 29. (Currently Amended) A base station as set forth in claim 21, in a cellular communication system including a plurality of cells, a plurality of said base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations, said base station comprising:

 control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, and wherein said control means sets an adjustment amount in said balance adjustment at a value of predetermined ratio to a difference between said transmission power upon initiation of said balance adjustment period and a reference value.
- 30. (Original) A control station in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations, each of said base station initiate control of a balance adjustment period from a frame to be m x Nperiod + L (wherein m is 0 or natural number and L is 0 or natural

number common to all base stations, Nperiod is a period for performing said balance adjustment).

said control station comprising means for selecting said Nperiod as a value satisfying a relationship of k x Nperiod = CFNmax (k is integer) assuming that a frame number of transmission frame to said mobile station is CFN, said balance adjustment period is Nperiod frame, minimum value of said CFN is 1, maximum value is CFNmax or minimum value is 0 and maximum value is CFNmax - 1.

31. (Cancelled)

32. (Currently Amended) A storage medium as set forth in claim 31, storing a transmission power control method in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations,

wherein said control program comprising a control step of controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, in each base station, and wherein assuming that a frame number of transmission frame to said mobile station is CFN and said balance adjustment period is Nperiod frame, said control step includes a step of initiating control of said balance adjustment period from the frame of

the frame number CFN to be mod (CFN, m x Nperiod) = L (wherein, m is natural number, L is or natural number smaller than m x Nperiod common to all base stations) in response to reception of said control instruction.

33. (Currently Amended) A storage medium as set forth in claim 31, storing a transmission power control method in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations,

wherein said control program comprising a control step of controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, in each base station, and wherein assuming that a frame number of transmission frame to said mobile station is CFN and said balance adjustment period is Nperiod frame, said control step is responsive to reception of said control instruction to perform initiation control of said balance adjustment period from a frame where a number at the first digit as expressing said CFN by m x Nperiod base number (wherein, m is natural number) becomes a predetermined value.

34. (Currently Amended) A storage medium as set forth in claim 31, storing a transmission power control method in a cellular communication system including a

plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations,

wherein said control program comprising a control step of controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, in each base station, and wherein assuming that a frame number of transmission frame to said mobile station is CFN and said balance adjustment period is Nperiod frame, said control step includes a step responsive to reception of said control instruction to perform initiation control of said balance adjustment period from a frame where said CFN becomes m x Nperiod + L (wherein m is 0 or natural number and L is 0 or natural number common to all base stations.

35. (Original) A storage medium as set forth in claim 34, wherein said m is natural number and said L is 0.

Claims 36-37 (Cancelled)

38. (Currently Amended) A storage medium as set forth in claim 31, storing a transmission power control method in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said

plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations,

wherein said control program comprising a control step of controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, in each base station, and wherein assuming that a frame number of transmission frame to said mobile station is CFN, said balance adjustment period is Nperiod frame, said control step selects said Nperiod as a value satisfying a relationship of k x Nperiod = CFNmax (k is integer) when minimum value of said CFN is 1, maximum value is CFNmax or minimum value is 0 and maximum value is CFNmax - 1, to initiate control of said balance adjustment period from a frame to be m x Nperiod + L (wherein m is 0 or natural number and L is 0 or natural number common to all base stations).

39. (Currently Amended) A storage medium as set forth in claim 31, storing a transmission power control method in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations.

wherein said control program comprising a control step of controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, in each base station, and wherein said control step sets an adjustment amount in said balance adjustment at a value of predetermined ratio to a difference between said transmission power upon initiation of said balance adjustment period and a reference value.

40. (Original) A storage medium storing a transmission power control method in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations, each of said base station initiate control of a balance adjustment period from a frame to be m x Nperiod + L (wherein m is 0 or natural number and L is 0 or natural number common to all base stations, Nperiod is a period for performing said balance adjustment).

said control program comprising step of selecting said Nperiod as a value satisfying a relationship of k x Nperiod = CFNmax (k is integer) assuming that a frame number of transmission frame to said mobile station is CFN, said balance adjustment period is Nperiod frame, minimum value of said CFN is 1, maximum value is CFNmax or minimum value is 0 and maximum value is CFNmax - 1.

41. (Currently Amended) A transmission power control system as set forth in claim 1, in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations,

wherein said base station comprising control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, and wherein assuming that a frame number of transmission frame to said mobile station is CFN, said balance adjustment period is Nperiod frame, and said CFN is incremented by one in every frame to be reset to 0 when said CFN exceeds a predetrmined number, said control means is responsive to reception of said control instruction to control said balance adjustment starting at a frame with CFN modulo Nperiod equal to 0, and repeating for every Nperiod frame, and restarting at a frame with CFN=0.

42. (Currently Amended) A transmission power control method as set forth in claim

11, in a cellular communication system including a plurality of cells, a plurality of base

stations respectively arranged in respective of said plurality of cells, mobile stations

located within said cells, and control station provided in common for said plurality of

base stations and transmitting control instruction for balance adjustment of transmission

power to respective of said mobile stations from said base stations,

wherein said method comprising a control step of controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, in each base station, and wherein assuming that a frame number of transmission frame to said mobile station is CFN, said balance adjustment period is Nperiod frame, and said CFN is incremented by one in every frame to be reset to 0 when said CFN exceeds a predetermined number, said control step is responsive to reception of said control instruction to control said balance adjustment starting at a frame with CFN modulo Nperiod equal to 0, and repeating for every Nperiod frame, and restarting at a frame with CFN=0.

43. (Currently Amended) A base station as set forth in claim 21, in a cellular communication system including a plurality of cells, a plurality of said base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations, said base station comprising:

control means for controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, and wherein assuming that a frame number of transmission frame to said mobile station is CFN, said balance adjustment period is Nperiod frame, and said CFN is incremented by one in every frame to be reset to 0 when said CFN exceeds a predetermined number, said control means is responsive to

reception of said control instruction to control said balance adjustment starting at a frame with CFN modulo Nperiod equal to 0, and repeating for every Nperiod frame, and restarting at frame with CFN=0.

44. (Currently Amended) A storage medium as set forth in claim 31, storing a transmission power control method in a cellular communication system including a plurality of cells, a plurality of base stations respectively arranged in respective of said plurality of cells, mobile stations located within said cells, and control station provided in common for said plurality of base stations and transmitting control instruction for balance adjustment of transmission power to respective of said mobile stations from said base stations,

wherein said control program comprising a control step of controlling initiation of a balance adjustment period for performing said balance adjustment from a frame number determined on the basis of frame number of the balance adjustment period, in each base station, and wherein assuming that a frame number of transmission frame to said mobile station is CFN, said balance adjustment period is Nperiod frame, and said CFN is incremented by one in every frame to be reset to 0 when said CFN exceeds a predetermined number, said control step is responsive to reception of said control instruction to control said balance adjustment starting at a frame with CFN modulo Nperiod equal to 0, and repeating for every Nperiod frame, and restarting at a frame with CFN=0.